



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Copy

Jan 20, 2017

via UPS

Shawn Soderberg
Executive Vice President, General Counsel
Bloom Energy Corporation – 7150 Legal
1299 Orleans Drive
Sunnyvale, CA 94089

Re: Request for Information Pursuant to Section 3007(a) of the Resource
Conservation and Recovery Act, 42 U.S.C. § 6927(a), Regarding Generation and
Management of Hazardous Waste by Bloom Energy Corporation
Reference Number: C17-008

Dear Ms. Soderberg:

The U.S. Environmental Protection Agency, Region III ("EPA") is requesting information related to Bloom Energy Corporation ("Bloom") and its client facilities located in Pennsylvania, Maryland, Virginia, West Virginia, and the District of Columbia. EPA is requesting this information pursuant to the authority granted to it under Section 3007(a) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6927(a), which provides in relevant part that "any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous wastes shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, . . . furnish information relating to such wastes" EPA hereby requires that you furnish to EPA, within **thirty (30) calendar days** of receipt of this letter, the information requested below, including all documents responsive to such request.

For each and every request, if you have any reason to believe that there may be a person(s) who may be able to provide a more detailed or complete response to such request or provide additional responsive documents, then as a part of your response to such request, identify each such person and the additional information or documents which such person may be able to provide. Furthermore, for each and every response, if information or documents responsive to such request are not in your possession, custody or control, then as part of your response to such request, identify each person from whom such information or documents may be obtained.

Please provide a separate narrative response to each information request. Precede each answer with the number of the question or letter of the subpart of the request to which it corresponds. A request for documents shall be construed as a request for any and all documents

maintained by you or in your custody, control, or possession or in the possession, custody or control of any of your employees or agents, relating to the matters described below. All copies of documents submitted to EPA in response to the following requests must be complete and legible.

As used herein, the term "document" means: writings (handwritten, typed or otherwise produced or reproduced) and includes, but is not limited to, any invoices, checks, receipts, bills of lading, weight receipts, toll receipts, correspondence, offers, contracts, agreements, deeds, leases, manifests, licenses, permits, bids, proposals, policies of insurance, logs, books of original entry, minutes of meetings, memoranda, notes, calendar or daily entries, agendas, bulletins, notices, announcements, charts, maps, photographs, drawings, manuals, brochures, reports of scientific study or investigation, process flow diagrams, schedules, price lists, telegrams, teletypes, phonograph records, magnetic voice or video records, tapes, summaries, magnetic tapes, punch cards, recordings, discs, computer print outs, or other data compilations from which information can be obtained or translated.

All other terms used in this request for information that are defined in RCRA, 42 U.S.C. §§ 6901 *et seq.*, 40 C.F.R. Parts 260-266, 268, and 273 (1998 ed.) shall have the meanings set forth therein.

Please provide the information requested below:

Information Request

1. Identify all facilities where a Bloom Energy Server has been installed within the States of Pennsylvania, Maryland, Virginia, West Virginia, and the District of Columbia. For each such facility, please provide the following:
 - a. Name of client, name of facility and address of facility.
 - b. Description of each Energy Server installed.
 - c. Date(s) of each Energy Server installation.
 - d. State whether or not the facility has requested and/or maintains a RCRA ID number. If it does, state the RCRA ID number and the date it was requested. If it does not, state why not, if known.
 - e. Number and volume of all desulfurization canister units ("Desulf Units") present at the facility.
2. For **each** of the facilities listed in response to question 1 above, state the date(s) and number of instances when any Desulf Unit(s) was removed from any installed Energy Server during the period of January 1, 2012 through January 1, 2017. For **each** such instance, please provide the following:

- a. Date of removal
 - b. Number of Desulf Units removed, and volume of each Desulf Unit removed
 - c. Number of days each Desulf Unit had been in service on the date of its removal
 - d. Description of why each unit was removed at the time of removal
 - e. State whether a "waste determination" and "LDR determination" was made for the material in each Desulf Unit
 - f. If a "waste determination" and "LDR determination" was made, state when such a determination(s) was made and the results of such determination(s)
 - g. If the material has been determined to be "hazardous waste," please state the specific EPA Hazardous Waste Code(s) associated with each such hazardous waste. If it has been determined not to be hazardous waste, explain the reasons for such determination.
 - h. State whether any hazardous waste determination made for such material was based on the generator's knowledge of the process that generated the material, or upon analytical results. If a determination was made on the basis of process knowledge, describe the scientific rationale for such a determination. If the determination was based on analytical results, describe the sampling procedures and provide copies of any and all such results.
3. For **each** of the removal instances listed in response to question 2 above, provide a detailed description of what happened to each Desulf Unit after removal. Please include in your response the following information for **each** Desulf Unit removed:
- a. State whether the Desulf Unit was transported off of the facility site in which it had been installed. If the Desulf Unit was not transported off of the facility site in which it had been installed, state why and provide its present location. If the Desulf Unit was transported offsite, provide the following for **each** Desulf Unit transported offsite:
 - i. Whether on-site accumulation or storage occurred prior to off-site shipment and identify the location of on-site accumulation or storage
 - ii. Identify the number of days the Desulf Unit was accumulated or stored on-site prior to off-site shipment
 - iii. Date of off-site transport
 - iv. Method of transport

- v. Name, address, and EPA ID number of transporter(s) utilized
 - vi. Name, address, and EPA ID number for any location, including temporary storage at locations considered "transfer facilities," that the Desulf Unit was stored after offsite transport. Provide storage duration in days for any location where the Desulf Unit was stored.
 - vii. Provide copies of all documents pertaining to each shipment of the Desulf Unit, including but not limited to: bills of lading, manifests, hazardous waste manifests, shipping invoices, and LDR notices and certifications.
- b. For each Desulf Unit removed from an Energy Server, provide a detailed description of any and all processes applied to the spent Desulf Unit and/or its contents after removal. Include in your response the following information:
- i. Date(s) of opening each Desulf Unit, date(s) of processing the material inside each Desulf Unit, and volume processed on each date
 - ii. Location of processing; including name, address, and EPA ID number of each processing facility
 - iii. Detailed description of processing conducted ("processing" in this context may include but not be limited to: opening, cleaning, stabilization, treatment, consolidation, separation, repairing, and/or refilling)
 - iv. Identify all chemicals used in processing the Desulf Unit and/or its contents, and include Safety Data Sheets for each of the chemicals identified
 - v. After processing, describe what happened to each Desulf Unit and its contents. If further transport occurred, answer questions 3.a.i-vii above for all subsequent transport occurrences
- c. Identify **any and all** material removed from each Desulf Unit. For the material in each Desulf Unit, provide the following:
- i. Date of removal and volume removed
 - ii. Location of removal; including name, address, and EPA ID number of location facility if applicable
 - iii. State whether a "waste determination" and "LDR determination" was made for the material removed
 - iv. If a "waste determination" and "LDR determination" was made, state when such a determination(s) was made and the results of such

determination(s)

- v. If the material was determined to be "hazardous waste," please state the specific EPA Hazardous Waste Code(s) associated with each such hazardous waste. If the material was determined not to be a hazardous waste, explain the reasons for such determination.
 - vi. State whether any hazardous waste determination made for such material was based on the generator's knowledge of the process that generated the material, or upon analytical results. If a determination was made on the basis of process knowledge, describe the scientific rationale for such a determination. If the determination was based on analytical results, describe the sampling procedures and provide copies of any and all such results.
 - vii. Please state if the material has been shipped from the removal location and the date and method of such shipment(s). If it has not been shipped from that location, state its current location and explain why it has not been shipped from the removal location.
 - viii. If the material was shipped from the removal location, provide copies of all documents pertaining to each shipment, including but not limited to: bills of lading, manifests, hazardous waste manifests, shipping invoices, and LDR notices and certifications that accompanied and/or refer to each off-site shipment of this material.
 - ix. Please state whether the material was ultimately disposed of. If so, provide a description of the material disposed, date of disposal, volume disposed, description of disposal location, disposal facility name and EPA ID number, method of disposal, and provide copies of all documents related to the disposal.
 - x. Please state whether the material was ultimately reclaimed or recycled. If so, state whether the material was reclaimed or whether it was recycled, provide a description of the material reclaimed or recycled, date of reclamation or recycling, volume reclaimed or recycled, description of reclamation or recycling location, reclamation or recycling facility name and EPA ID#, method of reclamation or recycling, and provide copies of all documents related to the reclamation or recycling.
- d. Provide a detailed description of the current location and status of all removed Desulf Units and all material removed from any and all Desulf Units. For each Desulf Unit removed from an Energy Server and not currently reinstalled into an Energy Server, provide the following:
- i. Location of Desulf Unit, including name, address, and EPA ID number of

location facility if applicable

- ii. Identify the contents of the Desulf Unit, including a verification of whether the unit contains spent desulfurization media, new desulfurization media, or it is empty
 - iii. State whether a "waste determination" and "LDR determination" was made for the Desulf Unit and its contents
 - iv. If a "waste determination" and "LDR determination" was made, state when such a determination(s) was made and the results of such determination(s)
 - v. If the material has been determined to be "hazardous waste," please state the specific EPA Hazardous Waste Code(s) associated with each such hazardous waste. If the material has been determined not to be a hazardous waste, explain the reasons for such determination.
 - vi. State whether any hazardous waste determination made for such material was based on the generator's knowledge of the process that generated the material, or upon analytical results. If a determination was made on the basis of process knowledge, describe the scientific rationale for such a determination. If the determination was based on analytical results, describe the sampling procedures and provide copies of any and all such results.
4. Provide a detailed description of the Desulf Units themselves, including composition, volume, and design. Please include any associated Safety Data Sheets (SDS) for the units or contents. Identify if there are different types of Desulf Units employed for different Energy Servers. If so, provide a description of each type and a list of which types have been installed at each Energy Server location.
5. Provide a detailed description of how the Desulf Units become spent, and how often this occurs for each type of Energy Server in which they are installed.
6. Bloom has previously supplied information which suggests that it employs, or has employed, a computer database referred to as a "Tracking Tool," which includes information related to tracking the Desulf Units. Please provide a digital copy of this database, and a copy of any other database used by the facility for tracking the Desulf Units and/or their contents, covering at least the time period of January 1, 2012 through January 1, 2017.
7. In a March 12, 2015 submission from Michele Corash to Delaware Department of Natural Resources and Environmental Control Secretary David Small, Bloom provided analytical data related to the contents of the Desulf Units. Please provide a detailed description of the sampling procedures utilized in the generation of that data, including

but not limited to identifying whether samples were obtained prior to or after any "processing" occurred. If samples were obtained after "processing" occurred, provide a detailed description of any and all processing that occurred prior to the samples being collected.

The provisions of Section 3008 of RCRA, 42 U.S.C. § 6928, authorize EPA to pursue penalties for failure to comply with or respond adequately to an information request under Section 3007(a) of RCRA. In addition, providing false, fictitious, or fraudulent statements or representations may subject you to criminal penalties under 18 U.S.C. § 1001. The information you provide may be used by EPA in administrative, civil or criminal proceedings. **Bloom's response must include the signed and dated certification found on the final page of this letter.**

Bloom is entitled to assert a claim of business confidentiality covering any part or all of the information submitted, in a manner described in 40 C.F.R. § 2.203(b). Information subject to a claim of business confidentiality will be made available to the public only in accordance with 40 C.F.R. Part 2, Subpart B. Unless a claim of business confidentiality is asserted at the time the requested information is submitted, EPA may make this information available to the public without further notice to your facility.

Additionally, please find enclosed a document entitled "Information Sheet," concerning Small Business Resources and the Small Business Regulatory Enforcement and Fairness Act ("SBREFA"). This enclosure provides information on contacting the SBREFA Ombudsman to comment on federal enforcement and compliance activities and also provides information on compliance assistance. As noted in the enclosure, any decision to participate in such program or to seek compliance assistance does not relieve Bloom of its obligation to respond in a timely manner to an EPA enforcement action, create any rights or defenses under law, and will not affect EPA's decision to pursue an enforcement action. To preserve Bloom's legal rights, Bloom must comply with all rules governing the administrative enforcement process. The Ombudsman and fairness boards do not participate in the resolution of EPA's enforcement action.

This request for information is not subject to review by the Office of Management and Budget pursuant to the Paperwork Reduction Act, 44 U.S.C. §§ 3501-3520.

Please send your response to:

Martin Matlin (3LC32)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

If you have any questions concerning this matter, please direct technical questions to Mr. Martin Matlin, Enforcement Officer, at (215) 814-5789. Counsel for Bloom may contact Ms. Natalie Katz, Senior Assistant Regional Counsel of the Office of Regional Counsel, at (215) 814-2615.

Sincerely,

Carol Amend, Associate Director
Land and Chemicals Division
Office of RCRA Programs

Enclosures

cc: Martin Matlin (3LC32)
Sara Kinslow (3LC32)
Pauline Belgiovane (3LC32)
Natalie Katz (3RC30)